

A POLYPEPTIDE COMPRISING THE AMINO ACID OF AN N-TERMINAL
CHOLINE BINDING PROTEIN A TRUNCATE, VACCINE DERIVED THEREFROM
AND USES THEREOF

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ABSTRACT OF THE DISCLOSURE

This invention provides an isolated polypeptide comprising an amino acid sequence of a N-terminal choline binding protein A truncate in which the amino acid sequence is set forth in any of SEQ ID NOS: 1, 3-7, or 9-11, including fragments, mutants, variants, analogs, or derivatives, thereof. Also, this invention provides a
10 isolated polypeptide comprising an amino acid sequence of a N-terminal choline binding protein A truncate, wherein the amino acid is set forth in SEQ ID NO: 24, wherein the polypeptide retains its native tertiary structure and methods of preparation. This invention provides an isolated polypeptide comprising an amino acid sequence of a N-
15 terminal choline binding protein A truncate, wherein the polypeptide has lectin activity and does not bind to choline. This invention provides an isolated immunogenic polypeptide comprising an amino acid sequence of a N-terminal choline binding protein A truncate. This invention provides an isolated nucleic acid encoding a polypeptide comprising an amino acid sequence of a N-terminal choline binding protein A truncate.
20 Lastly, this invention provides pharmaceutical compositions, vaccines, and diagnostic and therapeutic methods of use.